

## **6.0 ENVIRONMENTAL OCCUPATIONAL SAFETY AND HEALTH PERMIT, COMPLIANCE, AND OTHER REGULATORY REQUIREMENTS**

### **6.1 INTRODUCTION AND PURPOSE**

As part of the *National Environmental Policy Act* (NEPA) process, the environmental impact statement (EIS) must consider whether actions described under its alternatives would result in a violation of any Federal, state, or local laws or requirements (40 *Code of Federal Regulations* [CFR] 1508.27) or require a permit, license, or other entitlement (40 CFR 1502.25). This chapter provides a summary of the major existing environmental requirements, agreements, and permits that relate to the U.S. Department of Energy's (DOE's) programmatic decision regarding construction and operations of a Modern Pit Facility (MPF).

There are a number of Federal environmental laws that affect environmental protection, health, safety, compliance, and/or consultation at every DOE location under consideration for siting of a MPF. In addition, certain environmental requirements have been delegated to state authorities for enforcement and implementation. Furthermore, state legislatures have adopted laws to protect health and safety and the environment. It is DOE policy to conduct its operations in a manner that ensures the protection of public health, safety, and the environment through compliance with all applicable Federal and state laws, regulations, orders, and other requirements.

The various action alternatives analyzed in this MPF EIS involve either the upgrading of existing DOE facilities or the construction and operations of new DOE facilities and the transportation of materials. Actions required to comply with statutes, regulations, and other Federal and state requirements may depend on whether a MPF is newly built or is incorporated as upgrades to an existing facility. Requirements vary among alternatives located in different states. In this EIS, alternatives are considered in the states of Nevada, New Mexico, South Carolina, and Texas. Chapter 3 provides a detailed discussion of these alternatives.

### **6.2 BACKGROUND**

Requirements governing construction and operations of a MPF arise primarily from six sources: Congress, Federal agencies, Executive Orders, legislatures of the affected states, state agencies, and local governments. In general, Federal statutes establish national policies, create broad legal requirements, and authorize Federal agencies to create regulations that conform to the statute. Detailed implementation of these statutes is delegated to various Federal agencies such as DOE, the U.S. Department of Transportation (DOT), and the U.S. Environmental Protection Agency (EPA). For many environmental laws under EPA jurisdiction, state agencies may be delegated responsibility for the majority of program implementation activities, such as permitting and enforcement, but EPA usually retains oversight of the delegated program.

Some applicable laws such as NEPA, the *Endangered Species Act*, and the *Emergency Planning and Community Right-To-Know Act* require specific reports and/or consultations rather than ongoing permits or activities. These would be satisfied through the legal/regulatory process, including the preparation of this EIS, leading to the siting of a MPF.

Other applicable laws establish general requirements that must be satisfied, but do not include processes (such as the issuance of permits or licenses) to consider compliance prior to specific

instances of violations or other events that trigger their provisions. These include the *Toxic Substances Control Act* (affecting polychlorinated biphenyl [PCB] transformers and other designated substances); the *Federal Insecticide, Fungicide, and Rodenticide Act* (affecting pesticide/herbicide applications); the *Hazardous Materials Transportation Act*; and (if there were to be a spill of a hazardous substance) the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA, also known as Superfund).

Executive Orders establish policies and requirements for Federal agencies. Executive Orders are applicable to executive branch agencies, but do not have the force of law or regulation.

In addition to implementing some Federal programs, state legislatures develop their own laws. State statutes supplement as well as implement Federal laws for protection of air and water quality and for groundwater. State legislation may address solid waste management programs, locally rare or endangered species, and local resource, historic, and cultural values. The laws of local governments add a level of protection to the public, often focusing on zoning, utilities, and public health and safety concerns.

Regulatory agreements and compliance orders may also be initiated to establish responsibilities and timeframes for Federal facilities to come into compliance with provisions of applicable Federal and state laws. There are also other agreements, memorandums of understanding, or formalized arrangements that establish cooperative relationships and requirements.

Each of the alternative sites being considered for a MPF is located on property controlled by DOE. DOE has the authority to regulate some environmental activities, as well as the health and safety aspects of nuclear facilities operations. The *Atomic Energy Act* of 1954, as amended, is the principal authority for DOE regulatory activities not externally regulated by other Federal or state agencies. Regulation of DOE activities is primarily established through the use of DOE orders and regulations.

External environmental laws, regulations, and Executive Orders can be categorized as applicable to either broad environmental planning and consultation requirements or regulatory environmental protection and compliance activities, although some requirements are applicable to both planning and operations compliance.

Section 6.3.1 discusses the major Federal statutes and regulations that impose nuclear safety and environmental protection requirements on DOE facilities and might require DOE to obtain a permit or license (or amendment thereof), prior to construction or operations of a MPF. Each of the applicable regulations and statutes establishes how activities are to be conducted or how potential releases of pollutants are to be controlled or monitored. These applicable regulations and statutes include requirements for the issuance of permits or licenses for new operations or new emission sources and for amendments to existing permits or licenses to allow new types of operations at existing sources.

Section 6.3.2 discusses Executive Orders. Section 6.3.3 identifies DOE regulations, orders, and procedures for compliance with the *Atomic Energy Act*, the *Occupational Safety and Health Act*, and other environmental, safety, and health matters. Section 6.3.4 identifies state and local laws, regulations, and ordinances, as well as local agreements potentially affecting the construction and operations of a MPF. Other regulatory requirements are discussed in Section 6.4. Section 6.4.1 identifies radioactive material packaging and transportation laws and regulations. Section 6.4.2 discusses emergency management and response laws, regulations, and Executive Orders.

Consultations with Federal, state, and local agencies and Federally-recognized Native American groups are discussed in Section 6.4.3. Section 6.5 provides alternative-specific information.

## **6.3 ENVIRONMENTAL STATUTES, ORDERS, AND AGREEMENTS**

### **6.3.1 Federal Environmental, Safety, and Health Statutes and Regulations**

This section describes the Federal environmental, safety, and health laws and regulations that may apply to the proposed action and alternatives.

#### ***National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.)***

NEPA establishes a national policy promoting awareness of the environmental consequences of human activity on the environment and consideration of environmental impacts during the planning and decision-making stages of a project. It requires Federal agencies to prepare a detailed EIS for any major Federal Action with potentially significant environmental impact.

This EIS has been prepared in accordance with NEPA requirements, Council on Environmental Quality regulations (40 CFR 1500 et seq.), and DOE provisions (10 CFR Part 1021, DOE Order 451.1B) for implementing the procedural requirements of NEPA. It discusses reasonable alternatives and their potential environmental consequences.

#### ***Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.)***

The *Atomic Energy Act* authorizes DOE to establish standards to protect health or minimize dangers to life or property for activities under DOE's jurisdiction. Through a series of DOE orders, an extensive system of standards and requirements has been established to ensure safe operation of DOE facilities. The DOE regulations are found in 10 CFR Parts 200-1099.

The *Atomic Energy Act* establishes regulatory control of the disposal of radioactive waste as well as production, possession, and use of three types of radioactive material: source, special nuclear, and byproduct materials. This Act authorizes DOE to set radiation protection standards for itself and its contractors at DOE nuclear facilities and provides exclusions from U.S. Nuclear Regulatory Commission (NRC) licensing for defense production facilities.

The *Atomic Energy Act* authorizes DOE to establish standards that protect health and minimize danger to life or property from activities under DOE's jurisdiction. The mechanisms through which DOE manages its facilities are the promulgation of regulations (set forth in 10 CFR 830) and issuance of DOE orders and associated standards and guidance. Requirements for environmental protection, safety, and health are implemented at DOE sites primarily through contractual mechanisms that establish the applicable DOE requirements for management and operating contractors.

Several DOE nuclear safety rules and environmental procedural rules are in effect (for example, 10 CFR 835, "Occupational Radiation Protection"), and more are in final stages of promulgation. Nuclear safety regulations are effective under the schedule and implementing requirements of each rule, regardless of whether they are included in the contract. DOE contractors are also required to comply with all applicable external laws and regulations, regardless of contract language.

Chapter 5 discusses the application of DOE procedures to the management and control of radioactive waste and material for each alternative. Potential occupational radiation doses and doses to the general public resulting from construction and operations of a MPF would be well within DOE limits.

***Clean Air Act of 1970, as amended (42 U.S.C. 7401 et seq.)***

The *Clean Air Act* is intended to “protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.” Section 118 of the *Clean Air Act* (42 U.S.C. 7418) requires that each Federal agency with jurisdiction over any property or facility engaged in any activity that might result in the discharge of air pollutants comply with “all Federal, state, interstate, and local requirements” with regard to the control and abatement of air pollution.

The *Clean Air Act*: (1) requires EPA to establish National Ambient Air Quality Standards (NAAQS) as necessary to protect the public health, with an adequate margin of safety, from any known or anticipated adverse effects of a regulated pollutant (42 U.S.C. 7409 et seq.); (2) requires establishment of national standards of performance for new or modified stationary sources of atmospheric pollutants (42 U.S.C. 7411); (3) requires specific emission increases to be evaluated so as to prevent a significant deterioration in air quality (42 U.S.C. 7470 et seq.); and (4) requires specific standards for releases of hazardous air pollutants (including radionuclides) (42 U.S.C. 7412). These standards are implemented through state implementation plans developed by each state with EPA approval. The *Clean Air Act* requires sources to meet standards and obtain permits to satisfy these standards.

Emissions of air pollutants are regulated by EPA under 40 CFR Parts 50-99. Radionuclide emissions from DOE facilities are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations in 40 CFR Part 61. Approval to construct a new facility or to modify an existing one may be required by these regulations under 40 CFR 61.07

Chapter 5 compares expected releases from MPF construction and operations at each site with applicable standards. Some releases will result from construction activities, such as heavy equipment operation. During operation, small releases will result during testing of emergency diesel generators and from other sources.

This EIS is primarily concerned with determining a candidate DOE site for a MPF. NNSA has selected for analysis a reference location at each of the alternative sites. A second tiered EIS would be prepared once a DOE site is identified for more detailed analysis, including consideration of alternative locations for a MPF within that site. A Prevention of Significant Deterioration analysis would be performed as part of that site-specific EIS.

In compliance with state and Federal programs, detailed analyses were conducted that demonstrate construction and operations of a MPF would not result in violations of ambient air quality standards, or contribute to unacceptable increases in pollutant levels. If a MPF were located in an area in which the attainment or maintenance of ambient air quality standards is not well established, the proposed alternatives would also be subject to *Clean Air Act* conformity reviews. A conformity review serves as a means to assure that a Federal action does not hinder or interfere with programs developed by state and Federal agencies to bring the area into compliance with ambient air standards. As described in the air quality sections of Chapter 5, each of the alternative sites is located in an

attainment area for all criteria pollutants. Although construction and operations of a MPF would result in criteria pollutant emissions, a conformity review is not necessary.

### ***Clean Water Act of 1972, as amended (33 U.S.C. 1251 et seq.)***

The *Clean Water Act* (CWA), which amended the *Federal Water Pollution Control Act*, was enacted to “restore and maintain the chemical, physical, and biological integrity of the Nation’s water.” The CWA prohibits the “discharge of toxic pollutants in toxic amounts” to navigable waters of the United States. Section 313 of the CWA requires all branches of the Federal Government engaged in any activity that might result in a discharge or runoff of pollutants to surface waters to comply with Federal, state, interstate, and local requirements.

The CWA provides water quality standards for the Nation’s waterways, guidelines and limitations for effluent discharges from point-source discharges, and the National Pollutant Discharge Elimination System (NPDES) permit program. The NPDES Program is administered by EPA, pursuant to regulations in 40 CFR 122 *et seq.* Sections 401-405 of the *Water Quality Act* of 1987 added Section 402(p) to the CWA requiring that EPA establish regulations for permits for stormwater discharges associated with industrial activities. The stormwater provisions of the NPDES program are set forth at 40 CFR 122.26. Permit modifications are required if discharge effluent is altered. Section 404 of the CWA requires permits for the discharge of dredge or fill materials into navigable waters.

Chapter 4 discusses existing wastewater treatment facilities and discharges at each site. Chapter 5 discusses management of wastewater at each site during construction and operation of a MPF. Sanitary waste may be managed by use of portable toilet facilities during construction. During operations, sanitary wastes would generally be processed through existing facilities. Under the Nevada Test Site (NTS) Alternative, a septic system may be constructed to accept sanitary wastewater from MPF operations. Under the Carlsbad Site Alternative, construction of a new wastewater treatment facility or an expansion of the existing sewage treatment facility would be required to accommodate the projected sanitary wastewater volume from MPF operations. With the exception of the NTS and Carlsbad Site Alternatives, DOE would need to modify the existing NPDES permit at any of the sites to address the increase in wastewater volume. With the exception of the Carlsbad Site Alternative, DOE does not expect construction or operation of a MPF to result in discharges requiring a new NPDES permit.

### ***Safe Drinking Water Act of 1974, as amended (42 U.S.C. 300[f] et seq.)***

The primary objective of the *Safe Drinking Water Act* is to protect the quality of public drinking water supplies and sources of drinking water. The implementing regulations, administered by EPA unless delegated to states, establish standards applicable to public water systems. These regulations include maximum contaminant levels (including those for radioactivity) in public water systems, which are defined as water systems that have at least 15 service connections used by year-round residents or regularly serve at least 25 year-round residents. EPA regulations implementing the *Safe Drinking Water Act* are found in 40 CFR Parts 141-149. For radioactive material, the regulations specify that the average annual concentration of man-made radionuclides in drinking water, as delivered to the user by such a system, shall not produce a dose equivalent to the total body or an internal organ greater than 4 millirem per year (mrem/yr) beta and photon activity (40 CFR 141.16 [a]). Other programs established by the *Safe Drinking Water Act* include the Sole Source Aquifer Program, the Wellhead Protection Program, and the Underground Injection Control Program.

Chapter 4 discusses groundwater resources and current groundwater protection programs at each site. Chapter 5 explains that there would be no direct discharge to the surface or subsurface of sanitary or industrial effluent associated with MPF construction or operations under any alternative.

***Low-Level Radioactive Waste Policy Act of 1980, as amended (42 U.S.C. 2021 et seq.)***

This legislation amended the *Atomic Energy Act* to specify that the Federal Government is responsible for disposal of low-level waste (LLW) generated by its activities, and that states are responsible for disposal of other LLW. The Act provides for and encourages interstate compacts to carry out the state responsibilities.

LLW would be generated as a result of MPF operations. Chapter 4 discusses existing LLW management programs at each site. Section 4.2.11.8 discusses DOE's LLW management decisions based on the *Final Waste Management Programmatic Environmental Impact Statement for Managing, Treatment, Storage, and Disposal of Radioactive and Hazardous Waste* (Waste Management PEIS, DOE 1997a). Chapter 5 discusses the projected volume of LLW from MPF operations and the management of that waste under each of the alternatives. Consistent with the LLW and mixed LLW Record of Decision (ROD) (65 FR 10061, February 25, 2000) for the Waste Management PEIS, this EIS assumes that LLW resulting from MPF operations would be shipped to NTS for disposal if the alternative site (i.e., Pantex Site, Carlsbad Site) lacks an onsite LLW disposal capability.

***Solid Waste Disposal Act of 1965, as amended by the Resource Conservation and Recovery Act of 1976 and the Hazardous and Solid Waste Amendments of 1984 (42 U.S.C. 6901 et seq.)***

The *Solid Waste Disposal Act* of 1965, as amended, governs the transportation, treatment, storage, and disposal of hazardous and nonhazardous waste. Under the *Resource Conservation and Recovery Act* of 1976 (RCRA), which amended the *Solid Waste Disposal Act* of 1965, EPA defines and identifies hazardous waste; establishes standards for its transportation, treatment, storage, and disposal; and requires permits for persons engaged in hazardous waste activities. Section 3006 of RCRA (42 U.S.C. 6926) allows states to establish and administer these permit programs with EPA approval. The EPA regulations implementing RCRA are found in 40 CFR Parts 260-282.

Regulations imposed on a generator or on a treatment, storage, and/or disposal facility vary according to the type and quantity of material or waste generated, treated, stored, and/or disposed. The method of treatment, storage, and/or disposal also impacts the extent and complexity of the requirements.

MPF construction and operations activities would be conducted in compliance with this Act. Chapter 4 provides information on the management of hazardous waste, mixed LLW, and mixed transuranic (TRU) waste for each of the alternative sites. Chapter 5 discusses the management of waste resulting from MPF construction and operations.

***Federal Facility Compliance Act of 1992 (42 U.S.C. 6961 et seq.)***

The *Federal Facility Compliance Act*, enacted on October 6, 1992, amended RCRA. Section 102(a)(3) of the *Federal Facility Compliance Act* waives sovereign immunity for Federal facilities from fines and penalties for violations of RCRA, state, interstate, and local hazardous and solid waste management requirements. This waiver was delayed for three years following enactment

for violations of the land disposal restrictions (LDR) storage prohibition (RCRA Section 3004[j]) involving mixed waste at DOE facilities. This legislation further delays the waiver of sovereign immunity beyond the 3-year period at a facility if DOE is in compliance with an approved plan for developing treatment capacity and technologies for mixed waste generated or stored at the facility, as well as an order requiring compliance with the plan.

Mixed LLW and mixed TRU waste would be generated from MPF operations at each of the sites. The Waste Management sections of Chapter 4 and 5 provide information on the generation and management of mixed waste for each of the alternatives. Section 6.3.4 discusses the site treatment plans and orders at each of the alternative sites.

### ***Pollution Prevention Act of 1990 (42 U.S.C. 13101 et seq.)***

The *Pollution Prevention Act* establishes a national policy for waste management and pollution control. Source reduction is given first preference, followed by environmentally safe recycling, with disposal or releases to the environment as a last resort. In response to the policies established by the *Pollution Prevention Act*, DOE committed to participation in the *Superfund Amendments and Reauthorization Act*, Section 313, EPA 33/50 Pollution Prevention Program. The goal for facilities involved in compliance with Section 313 is to achieve a 33 percent reduction (from a 1993 baseline) in the release of 17 priority chemicals by 1997. On November 12, 1999, the Secretary of Energy issued 14 pollution prevention and energy efficiency goals for DOE. These goals were designed to build environmental accountability and stewardship into DOE's decision-making process. Under these goals, DOE will strive to minimize waste and maximize energy efficiency as measured by continuous cost-effective improvements in the use of materials and energy, using the years 2005 and 2010 as interim measurement points.

Efforts would be made to minimize the generation of waste from MPF construction and operations. As discussed in the Waste Management sections of Chapter 4, waste minimization programs are in place at each of the sites to reduce waste generation and to recycle where possible.

### ***Toxic Substances Control Act of 1976 (15 U.S.C. 2601 et seq.)***

The *Toxic Substances Control Act* of 1976 (TSCA) provides EPA with the authority to require testing of chemical substances entering the environment and to regulate them as necessary. The law complements and expands existing toxic substance laws such as Section 112 of the *Clean Air Act* and Section 307 of the CWA. TSCA requires compliance with inventory reporting and chemical control provisions of the legislation to protect the public from the risks of exposure to chemicals. TSCA also imposes strict limitations on the use and disposal of PCBs, chlorofluorocarbons, asbestos, dioxins, certain metal-working fluids, and hexavalent chromium.

MPF construction and operations are not expected to involve materials regulated under TSCA. DOE would comply with any TSCA requirements applicable to MPF activities under all alternatives.

### ***Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.)***

This Act regulates the use, registration, and disposal of several classes of pesticides to ensure that pesticides are applied in a manner that protects the applicators, workers, and the environment. Implementing regulations include recommended procedures for the disposal and storage of pesticides (40 CFR 165 [proposed regulation]) and worker protection standards (40 CFR 170).

MPF activities at all sites would need to be conducted in compliance with this Act.

***National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 et seq.)***

The *National Historic Preservation Act* of 1966 (NHPA) provides that sites with significant national historic value be placed on the National Register of Historic Places (NRHP), which is maintained by the Secretary of the Interior. The major provisions of the Act for DOE are Sections 106 and 110. Both sections aim to ensure that historic properties are appropriately considered in planning Federal initiatives and actions. Section 106 is a specific, issue-related mandate to which Federal agencies must adhere. It is a reactive mechanism that is driven by a Federal action. Section 110, in contrast, sets out broad Federal agency responsibilities with respect to historic properties. It is a proactive mechanism with emphasis on ongoing management of historic preservation sites and activities at Federal facilities. No permits or certifications are required under the Act.

Section 106 requires the head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking to ensure compliance with the provisions of the Act. It compels Federal agencies to “take into account” the effect of their projects on historical and archaeological resources and to give the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on such effects. Section 106 mandates consultation during Federal actions if the undertaking has the potential to affect a historic property. This consultation normally involves the State and/or Tribal Historic Preservation Officers (SHPO) and may include other organizations and individuals such as local governments, Native American tribes, and Native Hawaiian organizations. If an adverse effect is found, the consultation often ends with the execution of a memorandum of agreement that states how the adverse effects will be resolved.

The regulations implementing Section 106, found in 30 CFR 800, were revised on December 12, 2000 (65 FR 77698), and were effective January 11, 2001. This revision modified the process by which Federal agencies consider the effects of their undertakings on historic properties and provides the ACHP with a reasonable opportunity to comment with regard to such undertakings, as required by Section 106 of the NHPA. In promulgating the new regulations, the ACHP has sought to better balance the interests and concerns of various users of the Section 106 process, including Federal agencies, SHPOs, Tribal Historic Preservation Officers, Native Americans and Native Hawaiians, industry, and the public.

Chapter 4 describes cultural and paleontological resources at each alternative site. Chapter 5 discusses the potential impacts of MPF construction and operations to those resources.

***American Antiquities Act of 1906, as amended (16 U.S.C. 431 to 433)***

This Act protects historic and prehistoric ruins, monuments, and antiquities, including paleontological resources, on federally controlled lands from appropriation, excavation, injury, and destruction without permission.

Chapter 4 describes cultural and paleontological resources at each alternative site. Chapter 5 discusses the potential impacts of MPF construction and operations to those resources.

***Archaeological and Historic Preservation Act of 1974, as amended (16 U.S.C. 469 to 469c)***

This Act protects sites that have historic and prehistoric importance.



Chapter 4 describes cultural and paleontological resources at each alternative site. Chapter 5 discusses the potential impacts of MPF construction and operations to those resources.

***Archaeological and Resources Protection Act of 1979, as amended (16 U.S.C. 470 et seq.)***

This Act requires a permit for any excavation or removal of archaeological resources from Federal or Native American lands. Excavations must be undertaken for the purpose of furthering archaeological knowledge in the public interest, and resources removed remain the property of the United States. The law requires that whenever any Federal agency finds that its activities may cause irreparable loss or destruction of significant scientific, prehistoric, or archaeological data, the agency must notify the U.S. Department of the Interior (DOI) and may request that the DOI undertake the recovery, protection, and preservation of such data. Consent must be obtained from the Native American tribe or the Federal agency having authority over the land on which a resource is located before issuance of a permit; the permit must contain the terms and conditions requested by the tribe or Federal agency.

Chapter 4 describes cultural and paleontological resources at each alternative site. Chapter 5 discusses the potential impacts of MPF construction and operations to those resources.

***Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)***

The *Endangered Species Act* is intended to prevent the further decline of endangered and threatened species and to restore these species and their critical habitats. Section 7 of the Act requires Federal agencies having reason to believe that a prospective action may affect an endangered or threatened species or its critical habitat to consult with the U.S. Fish and Wildlife Service (USFWS) of the DOI or the National Marine Fisheries Service of the U.S. Department of Commerce to ensure that the action does not jeopardize the species or destroy its habitat (50 CFR 17). Despite reasonable and prudent measures to avoid or minimize such impacts, if the species or its habitat would be jeopardized by the action, a formal review process is specified.

Threatened or endangered species in the regions of the five sites have been identified and listed in Chapter 4. The Biological Resources section of Chapter 5 discusses the potential impact to these species.

Under the Los Alamos Site, SRS, and Carlsbad Site Alternatives, no listed species are currently known to be present within the representative locations evaluated for MPF. Preconstruction surveys would be performed to verify site conditions immediately prior to construction.

At NTS, there is a potential impact to the desert tortoise. Although desert tortoises are found throughout the southern half of the site, the abundance of tortoises at NTS is low to very low compared to other areas within the range of this species. Area 6, which is the reference location for a MPF, is located within that part of the Mojave Desert that makes up the northernmost territory for the desert tortoise. A preconstruction survey immediately prior to construction would be necessary if NTS were selected for a MPF.

At Pantex, there is a potential impact to the bald eagle, interior lesser tern, and whooping crane, which are seasonal residents or migrants on the Pantex site. In addition, the black-tailed prairie dog, which is a candidate for listing as threatened or endangered species, is a Pantex resident. A

preconstruction survey immediately prior to construction would be necessary if Pantex were selected for a MPF.

***Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703 et seq.)***

The *Migratory Bird Treaty Act*, as amended, is intended to protect birds that have common migratory patterns within the United States, Canada, Mexico, Japan, and Russia. It regulates the harvest of migratory birds by specifying conditions such as the mode of harvest, hunting seasons, and bag limits. The Act stipulates that it is unlawful at any time, by any means, or in any manner, to “kill ... any migratory bird.” Implementing regulations are found in *Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants* (50 CFR Part 10) and *Migratory Bird Hunting* (50 CFR Part 20). Although no permit for a MPF would be required under the Act, DOE is required to consult with the USFWS regarding impacts to migratory birds, and to avoid or minimize these effects in accordance with the USFWS Mitigation Policy.

Chapter 4 identifies species known at each alternative site. Chapter 5 discusses impacts to biological resources for the reference locations under each alternative.

***Bald and Golden Eagle Protection Act of 1973, as amended (16 U.S.C. 668-668d)***

The *Bald and Golden Eagle Protection Act*, as amended, makes it unlawful to take, pursue, molest, or disturb bald (American) and golden eagles, their nests, or their eggs anywhere in the United States (Section 668, 668c). A permit must be obtained from the DOI to relocate a nest that interferes with resource development or recovery operations. Implementing regulations are delineated in *Eagle Permits* (50 CFR Part 22).

As described in Chapter 4, with the exception of NTS and the Carlsbad Site, the bald eagle is known to occur at each of the alternative sites. The bald eagle occupies or uses portions of LANL. The bald eagle is sighted yearly at Pantex and is considered a winter resident and a spring and fall migrant. Bald eagles are found on SRS in all months of the year, with most sightings in the winter and spring months. There are three bald eagle nesting territories on SRS. Although the bald eagle is known to occur in Eddy County, there is no record of occurrence at the Carlsbad Site. Chapter 5 discusses impacts to biological resources for the reference locations under each alternative. The potential for MPF activities to disturb eagles would be evaluated as part of a biological assessment that would be prepared prior to construction.

***Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.)***

The *Fish and Wildlife Coordination Act* promotes more effectual planning and cooperation between Federal, state, public, and private agencies for the conservation and rehabilitation of the Nation’s fish and wildlife and authorizes the DOI to provide assistance. This Act requires consultation with the USFWS on the possible effects on wildlife if there is construction, modification, or control of bodies of water in excess of 4 hectares (ha) (10 acres [ac]) in surface area.

Chapter 4 describes the water resources at each of the alternative sites. MPF construction and operations would not result in any direct discharges to surface water bodies.

***Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)***

The *Farmland Protection Policy Act* requires Federal agencies to consider prime or unique farmlands when planning major projects and programs on Federal lands. Federal agencies are required to use prime and unique farmland criteria developed by the U.S. Department of Agriculture's Soil Conservation Service. Under the *Farmland Protection Policy Act*, the Soil Conservation Service is authorized to maintain an inventory of prime and unique farmlands in the United States to identify the location and extent of rural lands important in the production of food, fiber, forage, and oilseed crops (7 CFR 657).

As described in Chapter 4, there are no agricultural activities at the reference location at any of the alternative sites.

***American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996)***

This Act reaffirms Native American religious freedom under the First Amendment and sets U.S. policy to protect and preserve the inherent and constitutional right of Native Americans to believe, express, and exercise their traditional religions. The Act requires that Federal actions avoid interfering with access to sacred locations and traditional resources that are integral to the practice of religions.

Chapter 4 describes Native American resources known to exist at each site. Chapter 5 discusses the potential impacts to Native American resources for each alternative.

***Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001)***

This Act establishes a means for Native Americans to request the return or repatriation of human remains and other cultural items presently held by Federal agencies or federally assisted museums or institutions. The Act also contains provisions regarding the intentional excavation and removal of, inadvertent discovery of, and illegal trafficking in Native American human remains and cultural items. Major actions under this law include (1) establishing a review committee with monitoring and policymaking responsibilities; (2) developing regulations for repatriation, including procedures for identifying lineal descent or cultural affiliation needed for claims; (3) providing oversight of museum programs designed to meet the inventory requirements and deadlines of this law; and (4) developing procedures to handle unexpected discoveries of graves or grave goods during activities on Federal or tribal lands. All Federal agencies that manage land and/or are responsible for archaeological collections obtained from their lands or generated by their activities must comply with the Act. DOE managers of ground-disturbing activities on Federal and tribal lands should make themselves aware of the statutory provisions treating inadvertent discoveries of Native American remains and cultural objects. Regulations implementing the Act are found at 43 CFR Part 10.

Chapter 4 describes Native American resources known to exist at each site. Chapter 5 discusses the potential impacts to Native American resources for each alternative.

***Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.)***

The *Occupational Safety and Health Act* establishes standards for safe and healthful working conditions in places of employment throughout the United States. The Act is administered and enforced by the Occupational Safety and Health Administration (OSHA), a U.S. Department of

Labor agency. Although OSHA and EPA both have a mandate to reduce exposures to toxic substances, OSHA's jurisdiction is limited to safety and health conditions that exist in the workplace environment.

Under the Act, it is the duty of each employer to provide a workplace that is free of recognized hazards that are likely to cause death or serious physical harm. Employees have a duty to comply with the occupational safety and health standards and rules, regulations, and orders issued under the Act. OSHA regulations (29 CFR Part 1910) establish specific standards telling employers what must be done to achieve a safe and healthful working environment. Government agencies, including DOE, are not technically subject to OSHA regulations, but are required under 29 U.S.C. 668 to establish their own occupational safety and health programs for their places of employment consistent with OSHA standards. DOE emphasizes compliance with these regulations at its facilities and prescribes, through DOE orders, the OSHA standards that contractors shall meet, as applicable to their work at government-owned, contractor-operated facilities (DOE Order 440.1A). DOE keeps and makes available the various records of minor illnesses, injuries, and work-related deaths as required by OSHA regulations.

MPF construction and operations activities would be conducted in compliance with this Act.

#### ***Noise Control Act of 1972, as amended (42 U.S.C. 4901 et seq.)***

Section 4 of the *Noise Control Act* of 1972, as amended, directs all Federal agencies to carry out "to the fullest extent within their authority" programs within their jurisdictions in a manner that furthers a national policy of promoting an environment free from noise jeopardizing health and welfare.

DOE programs to promote control of noise at each of the sites are discussed in Chapter 4. Chapter 5 discusses the potential noise impact of MPF construction and operations for each alternative.

### **6.3.2 Executive Orders**

#### **Executive Order 11514 (Protection and Enhancement of Environmental Quality, March 5, 1970)**

This order (regulated by 40 CFR 1500-1508) requires Federal agencies to continually monitor and control their activities to: (1) protect and enhance the quality of the environment, and (2) develop procedures to ensure the fullest practicable provision of timely public information and understanding of the Federal plans and programs that may have potential environmental impacts so that the views of interested parties can be obtained. DOE has issued regulations (10 CFR 1021) and DOE Order 451.1B for compliance with this Executive Order.

This EIS has been prepared in accordance with NEPA requirements (i.e., 40 CFR 1500-1508, 10 CFR 1021, and DOE Order 451.1B).

#### **Executive Order 11593 (National Historic Preservation, May 13, 1971)**

This order directs Federal agencies to locate, inventory, and nominate qualified properties under their jurisdiction or control to the NRHP. This process requires DOE to provide the ACHP the opportunity to comment on the possible impacts of the proposed activity on any potential eligible or listed resources.

Chapter 4 identifies historic resources at each of the alternative sites. Chapter 5 discusses potential impacts to historic resources at each site.

#### **Executive Order 11988 (Floodplain Management, May 24, 1977)**

This order requires Federal agencies to establish procedures to ensure that the potential effects of flood hazards and floodplain management are considered for any action undertaken in a floodplain, and that floodplain impacts be avoided to the extent practicable. DOE regulations in 10 CFR Part 1022 establish policy and procedures for discharging the DOE's responsibilities with respect to compliance with this order.

Chapter 4 identifies the delineated floodplains at each alternative site. MPF construction and operations are not expected to impact floodplains at any of the sites. With exception of NTS, and SRS and Carlsbad Site, the reference locations analyzed for a MPF are not located within the 100-year or 500-year floodplains.

Because of the size of NTS, no comprehensive floodplain analysis has been conducted to delineate the 100-year and 500-year floodplains. If NTS were selected, the proposed MPF would be sited in accordance with applicable regulatory requirements and DOE Orders, including this Executive Order.

The reference location at SRS is outside the 100-year floodplain, but information regarding the 500-year floodplain is not available. If SRS were selected, the proposed MPF would be sited in accordance with applicable regulatory requirements and DOE Orders, including this Executive Order.

The reference location at the Carlsbad Site is outside the 100-year floodplain, but information regarding the 500-year floodplain is not available. If the Carlsbad Site were selected, the proposed MPF facilities would be sited in accordance with applicable regulatory requirements and DOE Orders including this Executive Order.

#### **Executive Order 11990 (Protection of Wetlands, May 24, 1977)**

This order requires Federal agencies to avoid any short- or long-term adverse impacts on wetlands wherever there is a practicable alternative. DOE regulations at 10 CFR Part 1022 establish policy and procedures for discharging DOE's responsibilities with respect to compliance with this order.

Chapter 4 identifies the wetlands at each alternative site. MPF construction and operations are not expected to impact wetlands at any of the sites. There are no wetlands within the reference locations analyzed for construction of a MPF and the associated construction staging and laydown areas.

#### **Executive Order 12088 (Federal Compliance with Pollution Control Standards, October 13, 1978, as amended by Executive Order 12580, Federal Compliance with Pollution Control Standards, January 23, 1987)**

This order directs Federal agencies to comply with applicable administrative and procedural pollution control standards established by, but not limited to, the *Clean Air Act*, *Noise Control Act*, *CWA*, *Safe Drinking Water Act*, *TSCA*, and *RCRA*.

MPF construction and operations activities at each of the alternative sites would be conducted in compliance with this order.

**Executive Order 12580 (Superfund Implementation, August 28, 1996)**

This order delegates to the heads of Executive departments and agencies the responsibility of undertaking remedial actions for releases or threatened releases that are not on the National Priorities List and for removal actions, other than emergencies, where the release is from any facility under the jurisdiction or control of executive departments and agencies.

MPF construction and operations activities at each of the alternative sites would be conducted in compliance with this order.

**Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994)**

This order requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.

The Environmental Justice section of Chapter 5 provides information that demonstrates compliance with this order.

**Executive Order 13007 (Indian Sacred Sites, May 24, 1996)**

This order requires: “In managing Federal lands, each executive branch agency with statutory or administrative responsibility for the management of Federal lands shall, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, (1) accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and (2) avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies shall maintain the confidentiality of sites.”

Chapter 4 identifies Native American resources at each alternative site. Chapter 5 discusses the potential impacts to Native American resources. A cultural resource survey will be done at the selected site prior to any construction activity.

**Executive Order 13101 (Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition, September 14, 1998)**

This order requires each Federal agency to incorporate waste prevention and recycling in its daily operations and to work to increase and expand markets for recovered materials. This order states that it is national policy to prefer pollution prevention, whenever feasible. Pollution that cannot be prevented should be recycled; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner. Disposal should be employed only as a last resort.

MPF construction and operations activities at each of the alternative sites would be conducted in compliance with this order.

### **Executive Order 13112 (Invasive Species, February 3, 1999)**

This order requires Federal agencies to prevent the introduction of invasive species to provide for their control, and to minimize their economic, ecological, and human health impacts.

MPF construction and operations activities at each of the alternative sites would be conducted in compliance with this order.

### **Executive Order 13123 (Greening the Government Through Efficient Energy Management, June 3, 1999)**

This order directs Federal agencies to improve energy management in order to save taxpayer dollars and reduce emissions that contribute to air pollution and global climate change.

MPF construction and operations activities at each of the alternative sites would be conducted in compliance with this order.

### **Executive Order 13148 (Greening the Government Through Leadership in Environmental Management, April 21, 2000)**

This order sets new goals for pollution prevention, requires all Federal facilities to have an environmental management system, and requires compliance or environmental management system audits.

MPF construction and operations activities at each of the alternative sites would be conducted in compliance with this order.

### **Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments, November 6, 2000)**

This order requires agencies to establish regular and meaningful consultation with tribal officials in the development of policies that have tribal implications.

MPF construction and operations activities at each of the alternative sites would be conducted in compliance with this order.

## **6.3.3 DOE Environmental, Safety, and Health Regulations and Orders**

The *Atomic Energy Act* authorizes DOE to establish standards to protect health and/or minimize the dangers to life or property from activities under DOE's jurisdiction. Through a series of DOE orders and regulations, an extensive system of standards and requirements has been established to ensure safe operation of DOE facilities.

DOE regulations are found in Title 10 of the CFR. These regulations address such areas as energy conservation, administrative requirements and procedures, nuclear safety, and classified information. For the purpose of this EIS, relevant regulations include: "Procedural Rules for DOE Nuclear Activities" (10 CFR 820), "Nuclear Safety Management" (10 CFR 830), "Occupational Radiation Protection" (10 CFR 835), "National Environmental Policy Act Implementing Procedures" (10 CFR 1021), and "Compliance with Floodplains/Wetlands Environmental Review Requirements" (10 CFR 1022).

DOE orders are issued in support of environmental, safety, and health programs. Many DOE orders have been revised and reorganized to reduce duplication and eliminate obsolete provisions. New DOE orders are organized by series, with each number identified by three digits, and include all DOE orders, policies, manuals, and requirement documents, notices, and guides. The remaining DOE orders, which are identified by four digits, are expected to be revised, and converted to the new DOE numbering system. The major DOE orders pertaining to construction and operation of a MPF are listed in Table 6.3.3–1.

**Table 6.3.3–1. DOE Orders and Directives Relevant to MPF**

<b>DOE Order</b>	<b>Subject</b>
<b>Leadership/Management/Planning</b>	
151.1A	Comprehensive Emergency Management System (11/01/00)
<b>Information and Analysis</b>	
225.1A	Accident Investigations (11/26/97)
231.1	Environment, Safety, and Health Reporting (09/30/95; Change 2, 11/07/96)
232.1A	Occurrence Reporting and Processing of Operations Information (07/21/97)
252.1	Technical Standards Program (11/19/99)
<b>Work Process</b>	
411.1-1B	Safety Management Functions, Responsibilities, and Authorities Manual (5/22/01)
414.1A	Quality Assurance (09/29/99; Change 1, 07/12/01)
420.1A	Facility Safety (05/20/02)
425.1C	Startup and Restart of Nuclear Facilities (03/13/03)
430.1A	Life Cycle Asset Management (10/14/98)
433.1	Maintenance Management Program for DOE Nuclear Facilities (06/01/01)
435.1	Radioactive Waste Management (07/09/99; Change 1, 08/28/01)
440.1A	Worker Protection Management for DOE Federal and Contractor Employees (03/27/98)
450.1	Environmental Protection Program (01/15/03)
451.1B	National Environmental Policy Act Compliance Program (10/26/00; Change 1, 09/28/01)
460.1A	Packaging and Transportation Safety (10/02/96)
460.2	Departmental Materials Transportation and Packaging Management (09/27/95; Change 1, 10/26/95)
461.1	Packaging and Transfer or Transportation of Materials of National Security Interest (09/29/00)
470.1	Safeguards and Security Program (09/28/95; Change 1, 06/21/96)
470.2B	Independent Oversight and Performance Assurance Program (10/31/02)
471.1A	Identification and Protection of Unclassified Controlled Nuclear Information (06/30/00)
471.2A	Information Security Program (03/27/97)
472.1C	Personnel Security Activities (03/25/03)
473.1	Physical Protection Program (12/23/02)
473.2	Protective Force Program (06/30/00)
474.1A	Control and Accountability of Nuclear Materials (11/22/00)
<b>External Relationships</b>	
1230.2	American Indian Tribal Government Policy (04/08/92)
<b>Personnel Relations and Services</b>	
3790.1B	Federal Employee Occupational Safety and Health Program (01/07/93)
<b>Environmental Quality and Impact</b>	
5400.5	Radiation Protection of the Public and the Environment (02/08/90; Change 2, 01/07/93)
5480.4	Environmental Protection, Safety, and Health Protection Standards (05/15/84; Change 4, 01/07/93)
5480.19	Conduct of Operations Requirements for DOE Facilities (07/09/90; Change 2, 10/23/01)
5480.20A	Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities (11/15/94; Change 1, 07/12/01)
<b>Emergency Preparedness</b>	
5530.3	Radiological Assistance Program (01/14/92; Change 1, 04/10/92)
5530.5	Federal Radiological Monitoring and Assessment Center (07/10/92; Change 1, 12/02/92)
<b>Office of National Nuclear Security Administration</b>	
5660.1B	Management of Nuclear Materials (05/26/94)



### 6.3.4 State Environmental Laws, Regulations, and Agreements

Certain environmental requirements, including some discussed in Section 6.3.1, have been delegated to state authorities for implementation and enforcement. It is DOE policy to conduct its operations in an environmentally safe manner that complies with all applicable laws, regulations, and standards, including state laws and regulations. A list of applicable state laws, regulations, and agreements is provided in Table 6.3.4–1. This list is not exhaustive and other state laws and regulations may be applicable.

**Table 6.3.4–1. State Environmental Laws, Regulations, and Agreements Relevant to MPF**

Law/Regulation/Agreement	Citation/Date	Requirements
<b>Los Alamos Site and Carlsbad Site, New Mexico</b>		
New Mexico Air Quality Control Act	New Mexico Statutes Annotated (NMSA), Chapter 74, Environmental Improvement, Article 2, Air Pollution, and Implementing Regulations at New Mexico Administrative Code (NMAC) Title 20, Environmental Protection, Chapter 2, Air Quality	Establishes air quality standards and requires a permit prior to construction or modification of an air contaminant source. Also requires an operating permit for major producers of air pollutants and imposes emission standards for hazardous air pollutants.
New Mexico Radiation Protection Act	NMSA, Chapter 74, Article 3, Radiation Control	Establishes state requirements for worker protection.
New Mexico Water Quality Act	NMSA, Chapter 74, Article 6, Water Quality; Implementing Regulations found in NMAC, Title 20, Chapter 6, Water Quality	Establishes water quality standards and requires a permit prior to the construction or modification of a water discharge source.
New Mexico Groundwater Protection Act	NMSA, Chapter 74, Article 6B, Groundwater Protection	Establishes state standards for protection of groundwater from leaking underground storage tanks.
New Mexico Solid Waste Act	NMSA, Chapter 74, Article 9, <i>Solid Waste Act</i> ; Implementing Regulations found in NMAC Title 20, Environmental Protection, Chapter 9, Solid Waste	Requires permit prior to construction or modification of a solid waste disposal facility.
New Mexico Hazardous Waste Act	NMSA, Chapter 74, Article 4, Hazardous Waste, and Implementing Regulations at NMAC Title 20, Environmental Protection, Chapter 4, Hazardous Waste	Requires a permit prior to construction or modification of a hazardous waste disposal facility.
New Mexico Hazardous Chemicals Information Act	NMSA, Chapter 74, Article 4E-1, Hazardous Chemicals Information	Implements the hazardous chemical information and toxic release reporting requirements of the EPCRA of 1986 (SARA Title III) for covered facilities.
New Mexico Wildlife Conservation Act	NMSA, Chapter 17, Game and Fish, Article 2, Hunting and Fishing Regulations, Part 3, Wildlife Conservation Act	Requires permit and coordination if a project may disturb habitat or otherwise affect threatened or endangered species.
New Mexico Raptor Protection Act	NMSA, Chapter 17, Article 2-14	Makes it unlawful to take, attempt to take, possess, trap, ensnare, injure, maim, or destroy any of the species of hawks, owls, and vultures.

**Table 6.3.4–1. State Environmental Laws, Regulations, and Agreements Relevant to MPF (continued)**

<b>Law/Regulation/Agreement</b>	<b>Citation/Date</b>	<b>Requirements</b>
New Mexico Endangered Plant Species Act	NMSA, Chapter 75, Miscellaneous Natural Resource Matters, Article 6, Endangered Plants	Requires coordination with the state.
Threatened and Endangered Species of New Mexico	NMAC, Title 19, Natural Resources and Wildlife, Chapter 33, Endangered and Threatened Species, Section 19.33.6.8	Establishes the list of threatened and endangered species.
Endangered Plant Species	NMAC, Title 19, Chapter 21, Endangered Plants	Establishes plant species list and rules for collection.
<i>New Mexico Cultural Properties Act</i>	NMSA, Chapter 18, Libraries and Museums, Article 6, Cultural Properties	Establishes SHPO and requirements to prepare an archaeological and historic survey and consult with the SHPO.
Environmental Oversight and Monitoring Agreement	Agreement in Principle Between DOE and the State of New Mexico, October 1, 1995	Provides DOE support for state activities in environmental oversight, monitoring, access, and emergency response.
Pueblo Accords	DOE 1992 Cooperative Agreements with each of four Pueblos	Sets forth the relationship between DOE and the Pueblos.
Los Alamos County Noise Restrictions	Los Alamos County Code, Chapter 8.28	Imposes noise restrictions and makes provisions for exceedances.
City of Albuquerque Noise Control Ordinance	Ordinance 21-1975	Establishes acceptable noise levels for various activities within the City of Albuquerque.
LANL Federal Facility Compliance Order	October 1995 (Issued to both DOE and LANL)	Requires compliance with the site treatment plan, which documents the development of treatment capacities and technologies or use of offsite facilities for treating mixed radioactive waste.
Consultation and Cooperation Agreement between DOE and the State of New Mexico	July 1, 1981, Agreement for Consultation and Cooperation, as amended by the November 30, 1984, “First Modification,” the August 4, 1987, “Second Modification,” and the March 22, 1988, modification to the Working Agreement	Affirms the intent of the Secretary of Energy to consult and cooperate with the State of New Mexico with respect to state public health and safety concerns at WIPP. Limits the volume of remote handled TRU waste that may be disposed of at WIPP to 7,080 m <sup>3</sup> (250,000 ft <sup>3</sup> ).

**Table 6.3.4–1. State Environmental Laws, Regulations, and Agreements Relevant to MPF (continued)**

<b>Law/Regulation/Agreement</b>	<b>Citation/Date</b>	<b>Requirements</b>
Joint Powers Agreement on Management of the WIPP Withdrawal Area	June 26, 1997	Establishes formal relationships and specifies responsibilities and protocols between DOE and New Mexico state government (New Mexico Department of Game and Fish, New Mexico Energy, Minerals and Natural Resources Department, New Mexico Office of Cultural Affairs, New Mexico State Land Office) with respect to WIPP land management.
<b>Nevada Test Site, Nevada</b>		
Nevada Air Pollution Control Law	Nevada Revised Statutes (NRS), Title 40, Public Health and Safety, Chapter 445B, Air Pollution	Requires permit prior to construction or modification of an air contaminant source.
Nevada Air Quality Regulations	Nevada Administrative Code (NAC), Chapter 445B, Air Controls, Air Pollution	Implements both state and Federal (EPA) clean air statutes. Identifies permit and monitoring requirements.
Nevada Water Pollution Control Law	NRS Title 40, Chapter 445A, Water Controls	Requires permit prior to construction or modification of a water discharge source.
Nevada Water Pollution Control Regulations	NAC, Chapter 445A, Sections 070-348, Water Pollution Control	Classifies waters of the state, establishes standards for water quality, and specifies discharge permit requirements and notification requirements.
Nevada Water Quality Standards	NAC, Chapter 445A, Water Controls	Establishes water quality standards. Requires permit prior to discharge to surface waters or groundwaters of the state.
Nevada Drinking Water Regulations	NAC, Chapter 445A, Water Controls	Sets standards for drinking water specifications for certification and control of variances and exemptions. Sets standards for wells and other water supply systems. Establishes regulation of wells, aquifer exemptions, prohibited wells, operation, monitoring, etc., as well as plugging and abandonment activities.
Nevada Solid Waste Disposal Law	NRS, Title 40, Chapter 444, Sanitation	Requires permit prior to construction or modification of a solid waste disposal facility.

**Table 6.3.4–1. State Environmental Laws, Regulations, and Agreements Relevant to MPF (continued)**

<b>Law/Regulation/Agreement</b>	<b>Citation/Date</b>	<b>Requirements</b>
Nevada Solid Waste Regulations	NAC, Chapter 444, Sanitation, Sections 570-749, Solid Waste Disposal	Sets forth definitions, methods of disposal, and special requirements for hazardous waste collection and transportation standards and classification of landfills.
Nevada Hazardous Waste Regulations	NAC, Chapter 444, Sanitation, Sections 842-874, Facilities for Management of Hazardous Waste	Establishes fees, variances, restrictions, and permits. Adopts 40 CFR 2, 124, and 260 to 270, inclusive as a part of the Nevada Administrative Code.
Nevada Regulation of Highly Hazardous Substances	NAC, Chapter 459, Hazardous Materials, Sections 952-95528	Requires facilities having listed highly hazardous substances in threshold quantities to conduct a hazardous assessment, implement prevention and emergency response programs, and submit assessment and annual compliance reports.
Nevada Storage Tank Regulations	NAC, Chapter 590, Cleanup of Discharged Petroleum, Sections 700-790	Adopts Federal regulations at 40 CFR Part 280. Establishes requirements for cleanup of petroleum discharges.
Nevada Sewage Disposal Regulations	NAC, Chapter 444, Sanitation, Sections 750-840, Sewage Disposal	Establishes standards, regulations, permits, and requirements for septic tanks and other sewage disposal systems for dwellings, communities, and commercial buildings.
Nevada Public Waters Law	NRS, Title 48, Water Chapter 533, Adjudication of Vested Water Rights; Appropriation of Public Waters	Sets forth requirements, procedures, and a process for acquiring a permit for appropriation of public waters. Establishes permit fees and sets forth environmental requirements. Note that the Legislative Counsel Bureau, Carson City, has not published a corresponding chapter in the Nevada Administrative Code covering the implementation of Nevada Revised Statutes, Chapter 533.
Nevada Underground Water, Wells, and Related Drilling Requirements	NAC, Chapter 534, Underground Water and Wells, Sections 280-298, License to Drill Well and Sections 300-450, Drilling, Construction, and Plugging of Wells	Establishes ownership of underground waters and their appropriation for beneficial use. Specifies the conditions, requirements, and rules for acquiring such water. Sets forth license requirements for well drillers; requirements of drilling, construction, and plugging of wells; and protection of aquifers from pollution and waste.

**Table 6.3.4–1. State Environmental Laws, Regulations, and Agreements Relevant to MPF (continued)**

Law/Regulation/Agreement	Citation/Date	Requirements
Protection of Indigenous Flora	NRS Title 47, Forestry; Forestry Products and Flora, Chapter 527, Protection and Preservation of Timbered Lands, Trees, and Flora	Provides protection of indigenous flora. Plants declared to be threatened with extinction are placed on the state list of fully protected species.
Nevada Wildlife Regulations	NAC, Chapter 503, Hunting, Fishing, and Trapping; Miscellaneous Protective Measures, Sections 010-104, General Provisions	Specifies classification of wildlife as protected and unprotected.
Nevada Historic Preservation and Archaeology Law	NRS, Title 33, Libraries, Museums; Historic Preservation, Chapter 383, Historic Preservation and Archaeology	Requires permit prior to the investigation, exploration, or excavation of a historic or prehistoric site.
Mutual Consent Agreement between State of Nevada and DOE for the Storage of the Low-Level Land Disposal Restricted Mixed Radioactive Waste	Signed in January 1994, modified in June 1995 and 1998	Provides a 9-month period to prepare and submit a plan for the treatment and disposal of newly generated mixed LLW not covered under the Site Treatment Plan. Allows available storage capacity of the TRU waste pad to be used for storage of onsite-generated mixed LLW that does not meet RCRA land disposal restriction provisions.
Agreement in Principle between DOE and the State of Nevada	June 1999	Provides funding to Nevada for oversight of DOE's environmental, safety, and health activities.
Settlement Agreement between DOE and the State of Nevada	June 1992	Authorizes storage of only the current inventory of mixed TRU waste. Storage of additional TRU waste at NTS would require a permit.
Site Treatment Plan and Consent Order	March 1996	Address treatment of legacy mixed waste streams on the NTS. Under a June 1998 revision to the Order, new milestones and deadlines for mixed waste treatment must be proposed through annual updates to the Site Treatment Plan.
Federal Facility Agreement and Consent Order with DOE, the State of Nevada, and Department of Defense (DOD)	May 1996	Address environmental restoration of inactive contaminated sites at NTS and other sites in Nevada. The Agreement outlines a process for identifying, prioritizing, investigating, and remediating contaminated sites.
U.S. District Court of Nevada jurisdiction for the Death Valley Groundwater Flow System	U.S. v. Cappaert <i>et al.</i> , 375 F. Supp. 456 (D. Nevada 1974)	Maintains an adequate water supply while ensuring protection of the surrounding ecosystem.

**Table 6.3.4–1. State Environmental Laws, Regulations, and Agreements Relevant to MPF (continued)**

<b>Law/Regulation/Agreement</b>	<b>Citation/Date</b>	<b>Requirements</b>
<b>Pantex Site, Texas</b>		
Texas Air Pollution Control Regulations	TX Admin. Code, Title 30, Chapter 101-122, 305	Requires permit prior to construction or modification of an air contaminant source.
Texas Water Quality Standards	TX Admin. Code, Title 30, Chapter 305, 308-325	Requires permit prior to construction or modification of a water discharge source.
Texas Consolidated Permit Rules	TX Admin. Code, Title 30, Chapter 305	Requires permit prior to construction or modification of a water discharge source.
Texas Risk Reduction Standards	TX Admin. Code, Title 30, Chapter 335, Industrial Solid Waste and Municipal Hazardous Waste, Subchapter S: Risk Reduction Standards §§335.551 - 335.569	Regulates closure or remediation of facilities or areas containing industrial solid waste or municipal hazardous waste in accordance with §335.8.
Texas Public Drinking Water Regulations	TX Admin. Code, Title 30, Chapter 290	Requires permit prior to construction or modification of a water discharge source affecting a public water supply.
Texas Underground and Aboveground Storage Tanks Rules	TX Admin. Code, Title 30, Chapter 334	Requires permit prior to construction or modification of an underground storage tank.
Texas Spill Prevention and Control Regulations	TX Admin. Code, Title 30, Chapter 327	Requires certain spills to be reported and outlines response actions to be taken.
Texas General Permit Regulations	TX Admin. Code, Title 30, Chapter 205	Requires permit prior to discharge of stormwater or other groupings of waste discharges. Establishes conditions for general permits for wastewater discharges.
<i>Texas Solid Waste Disposal Act</i>	TX Statutes, Article 4477-7, and Implementing Regulations at TX Admin. Code, Title 30, Chapter 305, 335, Industrial Solid Waste and Municipal Hazardous Waste Regulations	Requires permit prior to construction or modification of a solid waste disposal facility.
Texas Endangered, Threatened, and Protected Native Plants Regulations	TX Admin. Code, Title 31, Natural Resources and Conservation, Part 2, TX Parks and Wildlife Department, Chapter 69, Resource Protection, Subchapter A, Endangered, Threatened, and Protected Native Plants	Requires permit for anyone who possesses, takes, or transports endangered, threatened, or protected plants or animals.

**Table 6.3.4–1. State Environmental Laws, Regulations, and Agreements Relevant to MPF (continued)**

Law/Regulation/Agreement	Citation/Date	Requirements
Antiquities Code of Texas	TX Statutes, Chapter 9, Natural Resources, Title 9, Heritage, Chapter 191	Requires permit for the examination or excavation of sites and the collection or removal of objects of antiquity.
EPA Administrative Order Docket No. VI-98-0012 and Docket No. VI-98-0401; Federal Facility Compliance Agreement, Docket No. VI-98-1210	Federal Facility Compliance Agreement signed November 28, 1998	This Order lists wastewater discharge permit violations and a schedule of corrective actions to achieve permit compliance. Federal Facility Compliance Agreement No. VI-98-1210 includes a compliance schedule. As of the end of 2000, all corrective actions were on or ahead of schedule.
Pantex Plant Site Treatment Plan/Compliance Plan and Agreed Order	October 3, 1995	Establishes schedules for development of treatment technologies for mixed LLW subject to the RCRA Land Disposal Restrictions. All milestones in the original plan were completed in 2000. The plan was updated in 2001 to address newly identified wastes and waste that required development of new disposition paths.
<b>Savannah River Site, South Carolina</b>		
<i>South Carolina Pollution Control Act</i>	SC Code of Laws, Title 48, Environmental Protection and Conservation, Chapter 1 and implementing regulations at SC Code of Regulations, R.61-62, Air Pollution Control Regulations and Standards	Requires permit prior to construction or modification of an air contaminant source.
South Carolina Water Classifications and Standards	SC Code of Regulations, Chapter 61, R.61-68	Classifies waters of the state and establishes standards for water quality.
South Carolina Water Pollution Control Permits	SC Code of Regulations, Chapter 61, R.61-9	Requires permit prior to construction or modification of a water discharge source.
South Carolina Standards for Wastewater Facility Construction	SC Code of Regulations, Chapter 61, R.61-67	Sets standards for permitting of wastewater treatment systems.
<i>South Carolina Safe Drinking Water Act</i>	SC Code, Title 44, Health, Chapter 55 and Implementing Regulations at SC Code of Regulations, Chapter 61, R.61-58, South Carolina State Primary Drinking Water Regulations	Establishes drinking water standards.
<i>Stormwater Management and Sediment Reduction Act</i>	SC Code of Laws, Title 48, Chapter 14	Requires submission of a stormwater management and sediment control plan and obtaining a permit to proceed prior to engaging in a land disturbing activity.

**Table 6.3.4–1. State Environmental Laws, Regulations, and Agreements Relevant to MPF (continued)**

<b>Law/Regulation/Agreement</b>	<b>Citation/Date</b>	<b>Requirements</b>
South Carolina Underground Storage Tank Control Regulations	SC Code of Regulations, Chapter 61, R.61-92	Requires permit prior to construction or modification of an underground storage tank. Establishes design and operating standards for underground storage tanks.
<i>South Carolina Hazardous Waste Management Act</i>	SC Code of Laws, Title 44, Health, Chapter 56 and Implementing Regulations at SC Code of Regulations, Chapter 61, R.61-79, South Carolina Hazardous Waste Management Regulations	Requires permit to operate, construct, or modify a hazardous waste treatment, storage or disposal facility.
South Carolina Hazardous Waste Management Location Standards	SC Code of Regulations, Chapter 61, R.61-104	Establishes requirements for the siting of hazardous waste treatment, storage, and disposal facilities.
<i>South Carolina Solid Waste Policy and Management Act</i>	SC Code, Title 44, Health Chapter 96 and Implementing Regulations at SC Code of Regulations, Chapter 61, R.61-107, Solid Waste Management	Establishes standards to treat, store or dispose of solid waste.
<i>South Carolina Nongame and Endangered Species Conservation Act</i>	SC Code, Title 50, Fish, Game, and Watercraft, Chapter 15	Requires consultation with SC Wildlife and Marine Resources Department and efforts to minimize impact.
South Carolina Museum Commission and Institute of Archaeology and Anthropology	SC Code of Laws, Title 60, Libraries, Archives, Museums and Arts, Section 60-13-210	Requires consultation with SC Historic Preservation Office and efforts to minimize impact.
Federal Facility Agreement with EPA Region IV and South Carolina Department of Health and Environmental Control (SCDHEC)	August 1993	Governs the corrective/remedial action process at SRS from site investigation through site remediation. Describes the process for setting annual work priorities. Stipulates design and operating standards for the SRS high-level waste tank systems.
SRS Site Treatment Plan and Consent Order	September 29, 1995	Addresses the development of capacities and technologies for treating SRS mixed wastes in accordance with the RCRA land disposal restrictions. Annual plan updates identify changes in mixed waste treatment status, including the addition of new mixed waste streams.



## **6.4 OTHER REGULATORY REQUIREMENTS**

### **6.4.1 Radioactive Material Packaging and Transportation Regulations**

DOT and NRC regulations govern the transportation of hazardous and radioactive materials and substances. The *Hazardous Material Transportation Act* of 1975 (49 U.S.C. 5105 *et seq.*) requires DOT to prescribe uniform national regulations for transportation of hazardous materials (including radioactive materials). Most state and local regulations regarding such transportation that are not substantively the same as DOT regulations are preempted (i.e., rendered void) (49 U.S.C. 5125). This allows state and local governments only to enforce the Federal regulations, not to change or expand upon them.

This program is administered by the DOT Research and Special Programs Administration, which coordinates its regulations with those of NRC (under the *Atomic Energy Act*) and EPA (under RCRA) when covering the same activities.

DOT regulations (49 CFR Parts 171-178, and 49 CFR Parts 383-397) contain requirements for identifying a material as hazardous or radioactive. These regulations interface with the NRC regulations for identifying material, but DOT hazardous material regulations govern the hazard communication (e.g., marking, hazard labeling, vehicle placarding, emergency response telephone number) and shipping requirements.

NRC regulations applicable to radioactive materials transportation are found in 10 CFR Part 71. These regulations include detailed packaging design and package certification testing requirements. Complete documentation of design and safety analysis and the results of the required testing are submitted to NRC to certify the package for use.

The transportation casks used to transport radioactive material are subject to numerous inspections and tests. These tests are designed to ensure that cask components are properly assembled and meet applicable safety requirements. Tests and inspections are clearly identified in the Safety Analysis Report for Packaging and/or the Certificate of Compliance for each cask. Casks are loaded and inspected by registered users in compliance with approved quality assurance programs. Reports of defects or accidental mishandling are submitted to NRC.

Chapter 5 discusses the potential impacts associated with transportation of radioactive material (plutonium pits, recyclable enriched uranium parts, TRU waste, LLW) for each alternative.

### **6.4.2 Emergency Management and Response Laws, Regulations, and Executive Orders**

This section discusses the laws, regulations, and Executive Orders that address the protection of public health and worker safety and require the establishment of emergency plans. These laws, regulations, and Executive Orders relate to the operation of facilities, including DOE facilities that engage directly or indirectly in the production of special nuclear material.

#### **6.4.2.1 Emergency Management and Response Laws**

##### ***Emergency Planning and Community Right-to-Know Act of 1986 (U.S.C. 11001 et seq.) (also known as “SARA Title III”)***

This Act requires emergency planning and notice to communities and government agencies concerning the presence and release of specific chemicals. EPA implements this Act under regulations found in 40 CFR Parts 355, 370, and 372. Under Subtitle A of this Act, Federal facilities are required to provide information (such as inventories of specific chemicals used or stored and releases that occur from these sites) to the state emergency response commission and to the local emergency planning committee to ensure that emergency plans are sufficient to respond to unplanned releases of hazardous substances. Implementation of the provisions of this Act began voluntarily in 1987, and inventory and annual emissions reporting began in 1988. DOE requires compliance with Title III as a matter of DOE policy at its contractor-operated facilities.

Chapter 4 describes emergency planning for each alternative site. Each alternative site is at an existing, operating DOE facility with an established emergency management program that would be activated in the event of an accident. These programs have been developed and maintained to ensure adequate response to most accident conditions and to provide response efforts for accidents not specifically considered. The emergency management plan for each site includes emergency planning, training, preparedness, and response.

Chapter 5 and Appendix C discuss the impacts of potential accidents for each alternative.

##### ***Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9604[I] also known as “Superfund”)***

This Act provides authority for Federal and state governments to respond directly to hazardous substance incidents. The Act requires reporting of spills, including radioactive spills, to the National Response Center.

DOE would comply with this requirement for any alternative.

##### ***Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (42 U.S.C. 5121)***

This Act, as amended, provides an orderly, continuing means of providing Federal government assistance to state and local governments in managing their responsibilities to alleviate suffering and damage resulting from disasters. The President, in response to a state governor’s request, may declare an “emergency” or “major disaster” to provide Federal assistance under this Act. The President, in Executive Order 12148, delegated all functions except those in Sections 301, 401, and 409 to the Director of the Federal Emergency Management Agency (FEMA). The Act provides for the appointment of a Federal coordinating officer who will operate in the designated area with a state coordinating officer for the purpose of coordinating state and local disaster assistance efforts with those of the Federal Government.

### ***Justice Assistance Act of 1984 (42 U.S.C. 3701-3799)***

This Act establishes Emergency Federal Law Enforcement Assistance, which provides assistance to state and local governments in responding to a law enforcement emergency. The Act defines the term “law enforcement emergency” as an uncommon situation which requires law enforcement, which is or threatens to become of serious or epidemic proportions, and with respect to which state and local resources are inadequate to protect the lives and property of citizens or to enforce the criminal law. Emergencies that are not of an ongoing or chronic nature (for example, the Mount Saint Helens volcanic eruption) are eligible for Federal law enforcement assistance including funds, equipment, training, intelligence information, and personnel.

### ***Price-Anderson Act (42 U.S.C. 2210)***

Enacted in 1957, this Act allows DOE to indemnify its contractors if the contract involves the risk of public liability from a nuclear incident. The 1988 *Price-Anderson Amendments Act* continued the indemnification of DOE operating contractors, but required the DOE to begin undertaking enforcement actions against those contractors who violate nuclear safety rules. The 1988 amendments allow DOE to assess civil fines against its contractors for safety violations, although the amended Act also exempts seven nonprofit institutions (including the University of California for activities at LANL) from civil penalties.

## **6.4.2.2 Emergency Management and Response Regulations**

### **Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release (10 CFR §30.72, Schedule C)**

This section of the NRC regulations provides a list that is the basis for both the public and private sector to determine whether the radiological materials they handle must have an emergency response plan for unscheduled releases, and is one of the threshold criteria documents for identifying hazards as required by DOE Order 151.1A, “Comprehensive Emergency Management System.” The “Federal Radiological Emergency Response Plan,” dated November 1995, primarily discusses offsite Federal response in support of state and local governments with jurisdiction during a peacetime radiological emergency.

Chapter 4 describes emergency preparedness for each alternative.

### **Occupational Safety and Health Administration Emergency Response, Hazardous Waste Operations, and Worker Right to Know (29 CFR 1910)**

This regulation establishes OSHA requirements for employee safety in a variety of working environments. It addresses employee emergency and fire prevention plans (Section 1910.38), hazardous waste operations and emergency response (Section 1920.120), and hazards communication (Section 1910.1200) to make employees aware of the dangers they face from hazardous materials at their workplace. These regulations do not directly apply to Federal agencies. However, Section 19 of the *Occupational Safety and Health Act* (29 U.S.C. 668) requires all Federal agencies to have occupational safety programs “consistent” with *Occupational Safety and Health Act* standards.

Chapter 4 describes DOE emergency programs.

### **Hazardous Materials Tables and Communications, Emergency Response Information Requirements (49 CFR 172)**

This regulation defines the requirements for marking, labeling, placarding, and documenting hazardous material shipments. The regulation also specifies the requirements for providing hazardous material information and training.

DOE would comply with this requirement for any alternative.

#### **6.4.2.3 Emergency Response and Management Executive Orders**

##### **Executive Order 12148 (Federal Emergency Management, July 20, 1979)**

This order transfers functions and responsibilities associated with Federal emergency management to the Director of FEMA. The order assigns the director the responsibility to establish Federal policies for, and to coordinate all civil defense and civil emergency planning, management, mitigation, and assistance functions of, executive agencies.

##### **Executive Order 12656 (Assignment of Emergency Preparedness Responsibilities, November 18, 1988)**

This order assigns emergency preparedness responsibilities to Federal departments and agencies.

##### **Executive Order 12938 (Proliferation of Weapons of Mass Destruction, November 14, 1994)**

This order states that the proliferation of nuclear, biological, and chemical weapons (“weapons of mass destruction”) and the means of delivering such weapons constitutes an unusual and extraordinary threat to the national security, foreign policy, and economy of the United States, and that a national emergency would be declared to deal with that threat.

#### **6.4.3 Consultations with Federal, State, and Local Agencies and Federally-Recognized Native American Groups**

Certain laws, such as the *Endangered Species Act*, *Fish and Wildlife Coordination Act*, and NHPA, require consultation and coordination by DOE with other governmental entities including other Federal agencies, state and local agencies, and Federally-recognized Native American groups. These consultations must occur on a timely basis and are generally required before any land disturbance can begin. Most of these consultations are related to biotic resources, cultural resources, and Native American rights. The biotic resource consultations generally pertain to the potential for activities to disturb sensitive species or habitats. Cultural resource consultations relate to the potential for disruption of important cultural resources and archaeological sites. Native American consultations are concerned with the potential for disturbance of ancestral Native American sites and the traditional practices of Native Americans.

This EIS is primarily concerned with determining a candidate DOE site for a MPF. NNSA has selected for analysis a reference location at each of the alternative sites. A second EIS would be prepared once a DOE site is identified for more detailed analysis, including consideration of alternative locations for a MPF in the vicinity of that site. Surveys would be conducted at the proposed location for a MPF prior to any construction. At that time, DOE would consult with Federal, state, and local agencies and Federally recognized Native American groups regarding the potential impacts to biotic resources, cultural resources, and Native American rights.

## **6.5 ALTERNATIVE-SPECIFIC INFORMATION**

### **6.5.1 Additional Requirements**

Under any alternative, new or modified permits would be needed prior to construction or operation of a MPF. These permits regulate many aspects of facility construction and operations, such as treatment and storage of hazardous waste and discharges of airborne or liquid effluents to the environment. Permits would be obtained through the appropriate Federal, state, or local agencies. As with consultations, a more detailed analysis of the required permits and/or approvals would occur as part of the second tiered EIS that DOE will prepare after a decision is made based on the siting alternatives evaluated in this EIS. In addition to permitting, the following sections discuss site-specific requirements that would apply to construction and operation of a MPF.

#### **6.5.1.1 Los Alamos Site Alternative**

##### **Hazardous Waste Facility Permit**

The New Mexico Environment Department (NMED) issued the original RCRA permit for LANL's waste management operations at Technical Areas (TA)-50, -54, and -16 on November 8, 1989, for a term of 10 years. On January 15, 1999, LANL submitted an application for a permit renewal for TA-54. That application also covered the hazardous waste container storage areas at TA-3 and TA-16, and at TA-54's Area G, Area L, and TA-54 west; hazardous waste treatment by solidification, cementation, and vitrification at TA-55; and hazardous waste treatment by burning and detonation at TA-14 and burning at TA-16. It includes general statements that corrective action will be conducted for releases of hazardous wastes and hazardous constituents at these areas. The original permit expired after 10 years, but was administratively continued pending the NMED review of LANL's permit renewal application. LANL continues to work on the application process to renew its Hazardous Waste Facility Permit and to respond to information requests from NMED about the history of hazardous waste generation and management at LANL.

LANL is not listed on EPA's National Priorities List but it follows some CERCLA guidelines for remediating sites that contain hazardous substances not covered by RCRA and/or that may not be included in Module VIII of the Hazardous Waste Facility Permit.

##### ***Resource Conservation and Recovery Act Corrective Action***

On November 26, 2002, NMED issued a final order to DOE and the University of California pursuant to New Mexico Statutes Annotated 1978 Sections 74-4-10.1 and 74-4-13 of the *New Mexico Hazardous Waste Act* and the New Mexico Hazardous Waste Management Regulations 20.4 New Mexico Administrative Code. The order contains investigation and cleanup requirements and a schedule for implementation of cleanup measures at LANL. In the draft order issued on May 2,

2002, NMED made a determination that the past or present handling, storage, treatment, and/or disposal of solid or hazardous wastes at the LANL may present an imminent and substantial endangerment to health and the environment. LANL challenged that determination. LANL also commented that the Endangerment Determination and order seek to regulate source, special nuclear, and byproduct material, as defined in the *Atomic Energy Act* of 1954, which are exempt from regulation under RCRA and the *New Mexico Hazardous Waste Act*. DOE is pursuing legal challenges to the endangerment finding and regulatory authority issue.

A MPF would not be expected to impact ongoing LANL remediation activities.

### **Site Treatment Plan**

In October 1995, the State of New Mexico issued a Federal Facility Compliance Order to LANL requiring compliance with a Site Treatment Plan. The LANL Site Treatment Plan, which is updated annually, provides overall schedules for achieving compliance with RCRA LDR storage and treatment requirements for mixed waste at LANL.

If LANL were selected as the site for a MPF, DOE would include mixed TRU waste and mixed LLW associated with MPF operations in a future update to the LANL Site Treatment Plan.

#### **6.5.1.2 Nevada Test Site Alternative**

NTS is subject to several formal compliance agreements with various regulatory agencies. Agreements with the State of Nevada include a Memorandum of Understanding covering releases of radioactivity; a Federal Facility Agreement and Consent Order, an Agreement in Principle covering environment, safety, and health activities; a Settlement Agreement to manage mixed TRU waste; and a Mutual Consent Agreement on management of mixed LDR wastes, among others. A brief description of these agreements and their relationship to a MPF follows.

### **Settlement Agreement**

The Settlement Agreement, which was signed by DOE and the Nevada Department of Environmental Protection in June 1992, authorizes the temporary storage of only NTS's current inventory of mixed TRU waste. The storage of additional mixed TRU waste would require a permit. Mixed TRU waste is not normally generated at NTS; the majority of mixed TRU waste stored at NTS was generated offsite.

DOE would be required to seek a permit for storage of TRU waste associated with MPF operations.

### **Federal Facility Agreement and Consent Order**

The agreement is a tri-party agreement with DOE, the State of Nevada, and the Department of Defense. The agreement, effective in May 1996, addresses environmental restoration of inactive contaminated sites at NTS and other sites in Nevada. The Parties agreed to negotiate to address needed environmental restoration. The Order outlines a process for identifying, prioritizing, investigating, and remediating contaminated sites. It also establishes a technical strategy for cleanup activities, maximizes the opportunity to complete multiple corrective actions, and provides a mechanism for public involvement.

A MPF would not be expected to impact NTS remediation activities under the Federal Facility Agreement and Consent Order.

### ***Federal Facility Compliance Act-Consent Order***

The State of Nevada and DOE approved the Order and its associated NTS Site Treatment Plan in March 1996. The Order and Plan address treatment of legacy mixed waste streams at NTS. Under a June 1998 revision to the Order, new milestones and deadlines for mixed waste treatment must be proposed through annual updates to the Site Treatment Plan.

If NTS were selected as the site for a MPF, DOE would include mixed TRU waste and mixed LLW associated with MPF operations in a future update to the NTS Site Treatment Plan.

### **Mutual Consent Agreement**

The Mutual Consent Agreement was signed by Nevada Operations Office and the State of Nevada in January 1994 and modified in June 1995 and 1998. The Mutual Consent Agreement authorizes the storage of newly identified mixed waste at the NTS Area 5. State of Nevada approval of a Treatment and Disposal Plan is required for mixed waste stored for greater than 9 months.

DOE would manage mixed LLW generated from MPF operations in accordance with the Mutual Consent Agreement. A Treatment and Disposal Plan would be prepared if storage of this waste for greater than 9 months were required.

### **Agreement in Principle**

This agreement includes commitments with regard to DOE technical and financial support to the State of Nevada for environmental, safety, and health oversight and associated monitoring activities. The DOE Nevada Operations Office/State of Nevada Joint Low-Level Waste Oversight Agreement was incorporated as an appendix to the Agreement in Principle. This appendix is a cooperative oversight arrangement between DOE and the State of Nevada and grants the state an increased role in monitoring the management of LLW generated at the NTS, as well as LLW generated elsewhere and disposed at NTS. By entering into the agreement, DOE and the State of Nevada agree to share information concerning waste types and quantities, in addition to general information that allows the state to conduct detailed oversight of NTS waste disposal operations.

Under this Agreement, the State of Nevada would oversee the disposal of LLW associated with MPF operations. This would occur under the NTS alternative, where LLW is generated and disposed of at NTS, as well as alternatives where LLW resulting from MPF operations is shipped to NTS for disposal (e.g., Pantex, WIPP).

### **6.5.1.3 Pantex Site Alternative**

#### **Site Treatment Plan**

DOE has prepared a Site Treatment Plan (known as the Compliance Plan) for mixed waste at Pantex, which identifies how DOE proposes to obtain commercial treatment or develop technologies for the site's mixed LLW. The Compliance Plan provides overall schedules for achieving compliance with LDR requirements for mixed wastes at Pantex and is enforceable under an Agreed Order issued by

the Texas Natural Resource Conservation Commission (TNRCC, now called the Texas Commission on Environmental Quality [TCEQ]). DOE provides annual updates to the Compliance Plan to the state for review and comment.

If Pantex were selected as the site for a MPF, DOE would include mixed TRU waste and mixed LLW associated with MPF operations in a future update to the Pantex Site Treatment Plan.

### **Hazardous Waste Permit**

Pantex was included on the National Priorities List in 1994. Corrective action requirements for environmental restoration at Pantex are included in the RCRA Hazardous Waste Operating Permit (HW-50284) administered jointly by EPA and the TCEQ. Pantex has identified 249 release sites within 144 Solid Waste Management Units (SWMUs) for investigation and remediation activities. RCRA Facility Investigations have been completed for all SWMU groupings. Remediation activities are performed to reduce contamination of soils and groundwater sufficiently to achieve a No Further Action designation under the Texas Risk Reduction Standards Guidance. The state has approved 93 release sites as requiring no further action.

Under the current baseline, DOE would complete environmental restoration and decontamination activities and turn over the Pantex facilities for long-term stewardship by FY2014. DOE recently proposed to accelerate these activities to completion by the end of FY2008 (DOE 2002j). Under this accelerated schedule, these activities would be completed prior to the start of the construction of MPF. Under either schedule, a MPF would not be expected to impact ongoing Pantex remediation activities.

#### **6.5.1.4 Savannah River Site Alternative**

### **Federal Facility Agreement**

SRS was placed on the National Priorities List in 1989. In August 1993, SRS entered into the Federal Facility Agreement with EPA Region IV and the South Carolina Department of Health and Environmental Control (SCDHEC). The Federal Facility Agreement addresses RCRA corrective action and CERCLA requirements applicable to cleanup at SRS. The Agreement governs the corrective/remedial action process from site investigation through site remediation. It also describes procedures for setting annual work priorities, including schedules and deadlines, for that process.

A MPF would not be expected to impact SRS remediation activities under the Federal Facility Agreement.

### **Site Treatment Plan**

On September 20, 1995, SCDHEC approved the Site Treatment Plan for SRS. SCDHEC issued a consent order, signed by DOE, requiring compliance with the plan on September 29, 1995. The Site Treatment Plan provides overall schedules for achieving compliance with RCRA LDR storage and treatment requirements for mixed waste at SRS. DOE provides SCDHEC with annual updates to the information in the SRS Site Treatment Plan.

If SRS were selected as the site for a MPF, DOE would include mixed TRU waste and mixed LLW associated with MPF operations in a future update to the SRS Site Treatment Plan.



### 6.5.1.5 Carlsbad Site Alternative

The following discusses limitations on the use of the WIPP land withdrawal area as they relate to the alternative to construct and operate a MPF at the Carlsbad Site.

#### ***WIPP Land Withdrawal Act (Public Law 102-579)***

The Act limits the use of the land withdrawal area to the purposes of WIPP. Section 3(a)(3) of the Act states the following:

“RESERVATION: Such lands are reserved for the use of the Secretary for the construction, experimentation, operation, repair and maintenance, disposal, shutdown, monitoring, decommissioning, and other authorized activities associated with the purposes of WIPP as set forth in Section 213 of the *Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act* of 1980 (Pub. L. 96-164; 93 Stat. 1259, 1265), and this Act.”

The purposes of WIPP as stated in Section 213 of the *Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act* of 1980 (Pub. L. 96-164; 93 Stat. 1259, 1265) are as follows:

“...the Secretary of Energy shall proceed ... Waste Isolation Pilot Plant is authorized as a defense activity for the Department of Energy, ... for the express purpose of providing a research and development facility to demonstrate the safe disposal of radioactive wastes resulting from the defense activities and programs ...”

In addition to the reservation in Section 3(a)(3), Section 4(a) of the *WIPP Land Withdrawal Act* gives general management authority of the land withdrawal area to the Secretary of Energy. Part of that authority allows “such non-WIPP related uses as the Secretary determines to be appropriate” (Section 4[b][3]). Although the examples in Section 4(b)(3) include grazing, hunting and trapping, the Act does not limit the acceptable non-WIPP related uses to those examples. Non-WIPP uses are “subject to such conditions and restrictions as may be necessary to permit the conduct of WIPP-related activities” (Section 4[b][2]).

The *WIPP Land Withdrawal Act* also requires the preparation of a land management plan. The *WIPP Land Management Plan* (DOE 1996a) incorporates the restrictions of the Act and the DOE Memorandum of Understanding with the DOI’s Bureau of Land Management (BLM). The Plan establishes management objectives and planned actions for the use of the withdrawn land until the end of the decommissioning phase. It promotes the concept of multiple-use management for the surface area of the withdrawn land and establishes a goal of minimizing land use restrictions where possible. The plan also provides opportunity for participation in the land use planning process by the public, and local, state, and Federal agencies.

The WIPP Land Management Plan provides for multi agency involvement in the administration of DOE land management actions. The Plan envisions and encourages direct communication among stakeholders, including Federal and state agencies involved in managing the resources within, or activities impacting the areas adjacent to, the land withdrawal area. It sets forth cooperative arrangements and protocols for addressing WIPP-related land management actions.

NNSA notes that legislation may be required to proceed with the construction and operation of a MPF at the Carlsbad Site either on land at the WIPP site or in the vicinity of the WIPP site.

The EPA's current compliance certification of WIPP does not consider the potential impacts of a MPF on the long-term performance of the repository. If the Secretary were to decide to locate a MPF in the vicinity of WIPP, DOE would need to provide EPA with sufficient information for the Agency to determine whether the potential impacts of a MPF should be included in the performance assessment to ensure that they would not adversely impact the repository's long-term performance. EPA's consideration of a MPF's potential impacts could result in a modification rulemaking involving the compliance certification.

### **NMED Hazardous Waste Permit and EPA 40 CFR Part 191 Compliance Certification**

On May 18, 1998, EPA determined that DOE had demonstrated that WIPP would comply with the TRU waste disposal regulations at Subparts B and C of 40 CFR Part 191 (63 FR 27354). EPA's certification determination allowed DOE to begin accepting TRU waste for disposal at WIPP, provided that other applicable environmental regulations were met.

Both the certification issued by the EPA and the Hazardous Waste Facility Permit issued by NMED with regard to closure and postclosure of the WIPP facility do not anticipate alternative uses of the land. Both documents require that the land be restored to as near its original condition as feasible as part of final closure. As part of the scoping process for this EIS, EPA has indicated that a decision to construct and operate a MPF at the Carlsbad Site would likely necessitate revisiting the status of WIPP's certification under 40 CFR Parts 191 and 194 (Cotsworth 2002). This would allow EPA to ensure that any potential effects of a MPF on waste emplacement and containment at the WIPP facility do not impact the basis for EPA's initial certification decision.

### **Consultation and Cooperation Agreement**

Public Law 96-164 excluded the WIPP repository from licensing by NRC and required DOE to reach a Consultation and Cooperation Agreement with the State of New Mexico in developing the facility. The Consultation and Cooperation Agreement affirms the intent of the Secretary of Energy to consult and cooperate with the State of New Mexico with respect to public health and safety concerns and spells out terms of future studies, communications activities, and technical issues.

The Environmental Evaluation Group was established in 1978 through a contract between the State of New Mexico and DOE. The 1981 Consultation and Cooperation Agreement and the *WIPP Land Withdrawal Act* also established the Environmental Evaluation Group as an oversight organization for WIPP on behalf of the State of New Mexico. This interdisciplinary group of scientists and engineers provides independent technical evaluation of WIPP activities. If the Carlsbad Site were selected for a MPF, the Environmental Evaluation Group may provide oversight of MPF activities to ensure the protection of public health and safety, and the environment of New Mexico.

### **Current Capacity Limitations at WIPP**

The total disposal capacity at WIPP is limited to 175,000 m<sup>3</sup> (6,180,000 ft<sup>3</sup>) under the *WIPP Land Management Act*. (Of this total, DOE Consultation and Cooperation Agreement with the State of New Mexico limits the volume of remote-handled TRU waste to 7,080 m<sup>3</sup> [250,000 ft<sup>3</sup>]). The Preferred Alternative in DOE's 1997 *WIPP Supplemental EIS II* (WIPP SEIS II) estimated a Basic

Inventory of 170,000 m<sup>3</sup> (6,004,000 ft<sup>3</sup>) of TRU waste that would be disposed of at WIPP over a 35-year operating period. This alternative formed the basis for DOE's 1998 Record of Decision to open WIPP (63 FR 3624).

Nevertheless, the WIPP SEIS II acknowledged, and DOE continues to recognize, that the amount of TRU waste to be disposed of could exceed the volumes identified in the WIPP SEIS II preferred alternative. This could occur in the future for a number of reasons. For example, DOE sites continue to improve the accuracy of their inventories, the nature of sites' missions may change over time, waste processing decisions being made for existing waste forms can generate additional TRU waste, and several sites have missions expected to extend beyond WIPP's currently planned operating period. A MPF would fall into this latter category, in that it would be fully operational in 2020 and for a subsequent period of 50 years.

If additional disposal capacity were needed but not readily available post-treatment, storage of waste would be needed until that additional capacity became available. The WIPP SEIS II analyses under Action Alternative 1 examined the impacts of storage and disposal of 312,000 m<sup>3</sup> (11,018,000 ft<sup>3</sup>) of TRU waste (WIPP SEIS section 3.2.2). This alternative included lag storage for a period of up to 160 years at all of the sites being considered as a MPF in this present EIS except WIPP. (Although the impacts at WIPP would likely be similar to those at other large sites, DOE would include analysis of lag storage there as part of the site-specific NEPA review that would be conducted prior to constructing the MPF, if WIPP were selected to host the facility.) The analyses under WIPP SEIS II Alternative 1 indicated that potential impacts to the public, involved workers, and non-involved workers from lag storage would be small. The LCFs would be one or less than one, and no cancers from potential exposure to hazardous chemicals would be expected (WIPP SEIS II section 5.2.9).

In the future, if inventory projects show a need for additional disposal capacity for TRU waste, DOE would initiate the development of strategies for expanding such capacity at an appropriate time. However, because DOE has made no plans to date regarding the location or design of a waste disposal facility for TRU waste beyond WIPP's current capacity, this MPF EIS assumed WIPP as the disposal location for TRU waste generated under each alternative, for the purposes of transportation analysis only.

## **6.5.2 Compliance History**

The following sections describe recent compliance activities at each of the alternative sites.

### **6.5.2.1 Los Alamos Site Alternative**

#### ***Clean Water Act and Safe Drinking Water Act***

In 2001, LANL was in compliance with its NPDES permit liquid discharge requirements in 100 percent of the samples from its sanitary effluent outfalls and in 99.6 percent of the samples from its industrial effluent outfalls. DOE reported four exceedances of the water quality parameters for industrial outfalls. Corrective actions were taken to address each these permit noncompliances. Concentrations of chemical, microbiological, and radioactive constituents in the LANL's drinking water system remained within Federal and state drinking water standards. Also during 2001, LANL corrected deficiencies noted during a July 12, 1999, EPA Region 6 compliance inspection of LANL's Stormwater Program (LANL 2002b).

### ***Clean Air Act***

In 1994, Concerned Citizens for Nuclear Safety filed a lawsuit against DOE and the Director of LANL alleging violations of the radionuclide NESHAP (40 CFR 61, Subpart H) provisions of the *Clean Air Act*. The parties settled the lawsuit out of court on January 25, 1997. DOE and LANL entered into a Consent Decree and a Settlement Agreement to resolve the lawsuit. Under the settlement provisions of the Consent Decree, up to four comprehensive independent audits of LANL's radioactive air emissions compliance program will be performed to verify whether LANL is in full compliance with the *Clean Air Act* (40 CFR 61, Subpart H).

The first audit assessed LANL's compliance for 1996 and concluded that LANL meets the dose standard for radioactive air emissions but does not meet several technical requirements of 40 CFR 61, Subpart H. LANL implemented most of the technical recommendations contained in the assessment report. The second audit determined that LANL was in compliance with the Federal regulations governing radioactive air emissions for the year 1999. The third audit confirmed that LANL's radioactive air emissions in 2001 were less than one fifth of what is allowed by the *Clean Air Act* and that LANL's air-monitoring processes will ensure future compliance with the law. The audit team also concluded that there were no substantive deficiencies requiring corrective actions that justify having a fourth audit under the Consent Decree (LANL 2002c).

### ***Resource Conservation and Recovery Act***

LANL staff frequently interact with regulatory personnel on RCRA and *New Mexico Hazardous Waste Act* requirements and compliance activities. LANL has received a number of orders issued by NMED for noncompliance during 1997 and 1998 with hazardous waste management requirements.

More recently, NMED conducted an annual hazardous waste compliance inspection at LANL from April 23 to the end of August 2001. On October 9, 2001, NMED issued a Notice of Violation to the University of California and DOE as a result of that inspection. The Notice of Violations identified 18 categories of violations, each with one or more instances of alleged noncompliance. The types of issues described ranged from waste determinations, generator's control of waste, exceeding waste storage time, incompatible chemical storage, training, emergency response, waste manifesting, mixed waste management under the Site Treatment Plan, waste piles, and prevention of releases. The University of California and DOE responded to the Notice of Violation in February 2002.

LANL met all of its Site Treatment Plan deadlines and milestones during 2001 (LANL 2002b).

### ***Price-Anderson Amendments Act***

Since 1996, LANL has been the subject of five enforcement actions under the DOE Price-Anderson Enforcement Program. Most recently, in December 2002, NNSA issued a preliminary notice of violation asserting that LANL had violated nuclear safety rules governing waste storage. The violations involve TRU waste stored in PF-185 from March 1996 until June 2001 without required nuclear safety documentation. LANL discovered the problem in June 2001 and transferred the waste to an approved facility.

### **6.5.2.2 Nevada Test Site Alternative**

There were no formal state inspections of NTS programs or enforcement actions during 2000 (NTS 2001). In addition, no environmental violations or enforcement actions were cited during 2001 or 2002 (EPA 2003). NTS continues to fulfill its requirements of the agreements discussed in Section 6.5.1. Compliance issues related to specific programs are noted in the following paragraphs.

#### ***Clean Water Act***

There are no NPDES permits for NTS because there are no wastewater discharges directly to onsite or offsite surface waters. However, discharges to sewage lagoons and ponds are regulated by the State of Nevada under a state general permit. NTS has maintained compliance with permit requirements. However, downsizing of NTS operations has resulted in low flow conditions at several sewage lagoon systems, which has reduced the efficiency of the lagoons to properly treat effluents. DOE plans to install septic tank systems in these areas (DOE 2002d).

#### ***Safe Drinking Water Act***

During 2000, the four public drinking water systems at NTS were in compliance with monitoring requirements, with one exception. Corrective action was initiated to resolve this problem. All other monitoring results were within regulatory limits. Onsite water wells and select offsite wells are monitored in accordance with Federal and state *Safe Drinking Water Act* regulations (DOE 2002d).

#### ***Resource Conservation and Recovery Act***

Federal and state environmental inspections were conducted in 2001 and 2002. No violations were cited during those inspections (EPA 2003).

#### ***Clean Air Act***

Criteria air pollutants emitted at NTS include particulates from construction, aggregate production, surface disturbances, and fugitive dust from vehicles traveling on unpaved roads; various pollutants from fuel-burning equipment, incineration, and open burning and volatile organics from fuel storage facilities. Emissions of hazardous air pollutants from current NTS sources are below regulatory requirements (DOE 2002d). There were no state inspections of NTS facilities possessing air quality permits during 2000.

Ambient air quality at NTS is not currently monitored for criteria pollutants or hazardous air pollutants, with the exception of radionuclides (DOE 2002d). NTS was in compliance with radionuclide emission requirements during 2000.

#### ***Comprehensive Environmental Response, Compensation, and Liability Act***

Other than reporting requirements, there is no formal CERCLA program at NTS (DOE 2002d).

#### ***Price-Anderson Amendments Act***

NTS has not been subject to any enforcement actions under the DOE Price-Anderson Enforcement Program.

### **6.5.2.3 Pantex Site Alternative**

The TCEQ (formerly TNRCC) routinely conducts RCRA, *Clean Air Act*, and drinking water compliance inspections. Overall, Pantex is in compliance with the applicable environmental laws and regulations. However, since this facility existed prior to the promulgation of many current environmental laws and regulations, both EPA and the State of Texas have allowed DOE to continue operations while taking actions to achieve full compliance with all applicable environmental regulatory requirements. Pantex has reported minor noncompliances pursuant to its State of Texas and EPA permits, but no cases of noncompliance that could have impacted human health or the environment have occurred.

#### **Compliance Agreements and Orders**

In 1994, Pantex was placed on the National Priorities List based on the presence of contamination due to past practices. DOE, TNRCC, and EPA Region 6 developed a Federal Facility Compliance Agreement to address CERCLA issues at Pantex.

EPA has issued two Administrative Orders to address prior noncompliance with Pantex's NPDES permit. DOE also entered into a Federal Facility Compliance Agreement (No. VI-98-1210) with EPA Region 6 relating to the same issues. As of the end of 2000, all corrective actions contained in the Administrative Orders and the Federal Facility Compliance Agreement were on schedule.

#### **Groundwater Protection**

Pantex conducts soil and groundwater monitoring in accordance with the corrective action provisions of its Hazardous Waste Permit No. HW-50284. Nonradiological contamination was found in the perched groundwater beneath the Zone 12 operations area (metals, explosives, and organic solvents), in the soil near operations areas (traces of metals and explosives), and in the ditches and playas that form Pantex's drainage system (metals and explosives). Some contaminants were also found in the perched aquifer on properties neighboring Pantex to the south and southeast.

Trichloroethene was detected with results above the drinking water standard in an Ogallala Aquifer monitoring well sample taken in May 1999. This aquifer is the primary source of drinking water for the surrounding landowners and the cities of Amarillo and Panhandle. A study concluded that an improperly constructed monitor well was allowing trichloroethene to migrate from the upper vadose, into the well, and down into the Ogallala Aquifer. Corrective measures eliminating the contaminant pathway into the Ogallala Aquifer have been completed. A Notice of Enforcement associated with the notification and reporting requirements relating to the discovery of trichloroethene in the Ogallala Aquifer was issued to Pantex by the TNRCC during 2000.

Antimony, cadmium, chromium, manganese, and thallium were also detected in a small number of samples in a few selected Ogallala Aquifer monitoring wells at levels that exceeded drinking water standards. These exceedances may be attributed to corrosion of the stainless steel well screens, casings, and pumps. It is Pantex's intent to plug wells that have become badly corroded. Monitoring for these constituents will continue.

#### **6.5.2.4 Savannah River Site Alternative**

##### **Notices of Violation**

No Notices of Violation were issued for SRS in 2001 under RCRA or the *Safe Drinking Water Act*. One Notice of Violation was issued under the *Clean Air Act*; and another, related to an oil release, was issued under the *South Carolina Pollution Control Act*.

Under the CWA, SRS's NPDES compliance rate was 99.6 percent. DOE reported 24 exceedances of the water quality parameters. Corrective actions were taken to address each of these permit noncompliances. No Notices of Violation were received under NPDES; however, SCDHEC issued one Notice of Violation under the *South Carolina Pollution Control Act* for an oil release at an NPDES-permitted stormwater outfall.

During 2001, SCDHEC conducted compliance inspections of 102 permitted sources at SRS, reviewing 141 permitted parameters. These included biennial stack tests and annual compliance inspections. As a result of the annual compliance inspections, SRS achieved a compliance rate of 99 percent and received one Notice of Violation under the *Clean Air Act* (WSRC 2002h).

##### **Consent Orders**

In October 1999, SCDHEC issued a consent order addressing compliance with water quality parameters set forth in the site's NPDES permit at outfall A-01. During 2000, a wetland treatment system was constructed to address these problems. The wetland system was operating and had achieved compliance with permit parameters by the end of 2001.

##### ***Price-Anderson Amendments Act***

Since 1996, SRS has been the subject of six enforcement actions under the DOE Price-Anderson Enforcement Program. Most recently, in March 2002, DOE issued a preliminary notice of violation asserting that SRS had failed to maintain and control the operation of safety equipment in its nuclear facilities. The notice included violation of facility safety basis requirements and ALARA deficiencies that contributed to unplanned worker uptakes and the spread of radioactive contamination.

#### **6.5.2.5 Carlsbad Site Alternative**

The *WIPP Land Withdrawal Act* authorizes EPA to oversee DOE's activities at WIPP. EPA is responsible for certifying WIPP's compliance with the Agency's radioactive waste disposal regulations (40 CFR 191). The Act also authorizes EPA to verify WIPP's compliance with all other applicable Federal environmental laws and regulations.

Section 9(a)(2) of the *WIPP Land Withdrawal Act* requires DOE biennially to submit to EPA documentation of continued compliance with the laws, regulations, and permit requirements set forth in Section 9(a)(1). This requirement is met by submission of the Biennial Environmental Compliance Report, issued in October of each even-numbered year. Section 9(a)(3) requires the Administrator of EPA to determine on a biennial basis whether WIPP is in compliance with the pertinent laws, regulations, and permit requirements. On May 9, 2003, EPA published its determination that for the period 2000 to 2002, the DOE-submitted documentation showed

continued compliance with applicable Federal laws pertaining to public health and safety or the environment (68 FR 25032).

***Price-Anderson Amendments Act***

WIPP has not been subject to any enforcement actions under the DOE Price-Anderson Enforcement Program.